

U.S. Patent Application Serial No. 10/533,963

Amendment filed December 17, 2008

Reply to OA dated September 17, 2008

REMARKS

By the present amendment, independent claim 4 has been amended to obviate the examiner's objections thereto and/or to further clarify the concepts of the present invention. The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated September 17, 2008. Entry of these amendments is respectfully requested.

In the Office Action, all of the pending claims, that is, claims 4-12, were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,638,609 to Chandran et al in view of either U.S. Patent publication 2003/0086865 to Sabacky et al or U.S. Patent 5,525,559 to Metcalf et al and optionally further in view of U.S. Patent 5,123,855 to Richards et al.

In making this rejection, it was asserted that the Chandran et al patent teaches the claimed process with two main exceptions:

- (1) While the Chandran et al patent apparently does disclose a high velocity pulsating flow gas having a frequency and a sound pressure within the ranges as claimed, the patent does not specifically disclose a pressure amplitude in the range set forth in the claims; and
- (2) The Chandran et al patent does not disclose that the process is specifically used to produce zirconium oxide from a raw material containing zirconium.

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As to the former (1), it apparently was the position taken in the Action that it would (a) be obvious to optimize this pressure amplitude from the basic teachings, or (b) such would be obvious from the teachings of the Richard patent. As to teaching deficiency (2), it was alleged that the publication to Sabacky et al or the patent to Metcalf et al would suggest to one of ordinary skill in the art to utilize the process according to the Chandran et al patent for the production of zirconium oxide. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. As can be noted from the above, independent claim 4 has been amended to recite "the concentration of neutralized hydroxides, neutralized coprecipitation hydroxides, hydrolyzates or composites thereof in the fine particles of the complex inorganic metal hydrate in the liquid is 5 to 50 % by weight." Support for this amendment may be found on lines 7 to 10 of page 10 of the application as filed. It is submitted that independent claim 4 as amended patentably distinguishes over the cited patents to Chandran et al, Richard, Sabacky et al and the patent to Metcalf et al, whether taken singly or in combination.

Among other things, none of the cited patents teaches or suggests the elements of "pulse combustion gas has pressure amplitude of at least $\pm 0.2 \text{ kg/cm}^2$ " and/or above newly added condition that "the concentration of neutralized hydroxides, neutralized coprecipitation hydroxides,

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hydrolyzates or composites thereof in the fine particles of the complex inorganic metal hydrate in the liquid is 5 to 50 % by weight."

According to the presently claimed invention, it was originally recognized the problem that "consider obtaining particles having sharp particle size distribution," and subsequently it was found that the above elements were necessary to solve the above problem. Each of the cited patents does not have same or close similarity to the problem to be solved. As a consequence, a person skilled in the art would not attempt to combine the patents, as there is no motivation to obtain the similar construction of the presently claimed invention.

More particularly, it is submitted that one of ordinary skill in the art would not be led to combine the teachings of the patents in the manner in which the examiner has done. It must be emphasized in support of the patentability of the subject invention over the teachings of the cited patents that none provides a suggestion to motivate one of ordinary skill in the art to combine their teachings in the manner proposed by the rejection. It is well established principle of U.S. patent practice that the prior art must contain some suggestion for combination since without such, any combination is pure speculation and is based on a prohibited hindsight reconstruction from applicants' own disclosure.

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For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claims 4 through 12 as amended over the cited patents are respectfully requested.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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